



ISW

Patent
Attorney's Docket No. 005950-832

THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of)
Robert M. Carlson, et al.) Group Art Unit: 2811
Application No.: 10/621,718) Examiner: Unassigned
Filed: July 16, 2003) Confirmation No.: 1570
For: DIAMONDROID-BASED COMPONENTS)
IN NANOSCALE CONSTRUCTION)

**INFORMATION DISCLOSURE STATEMENT
TRANSMITTAL LETTER**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Enclosed is a First Information Disclosure Statement and accompanying form PTO-1449 for the above-identified patent application.

- ☒ [X] No additional fee for submission of an IDS is required.
- ☐ [] The fee of \$180.00 (1806) as set forth in 37 C.F.R. § 1.17(p) is also enclosed.
- ☐ [] A statement under 37 C.F.R. § 1.97(e) is also enclosed.
- ☐ [] A statement under 37 C.F.R. § 1.97(e), and the fee of \$180.00 (1806) as set forth in 37 C.F.R. § 1.17(p) are also enclosed.
- ☐ [] Charge \$_____ to Deposit Account No. 02-4800 for the fee due.
- ☐ [] A check in the amount of \$_____ is enclosed for the fee due.

The Director is hereby authorized to charge any appropriate fees under 37 C.F.R. §§ 1.16, 1.17 and 1.21 that may be required by this paper, and to credit any overpayment, to Deposit Account No. 02-4800. This paper is submitted in duplicate.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

Date: July 14, 2004

By: Stephen F. Powell
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P.O. Box 1404
Alexandria, Virginia 22313-1404



Patent
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SECOND
INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure as set forth in 37 C.F.R. § 1.56, Applicants hereby submit the following information in conformance with 37 C.F.R. §§ 1.97 and 1.98.

Pursuant to 37 C.F.R. § 1.98, a copy of each of the documents cited is enclosed. However, copies of the listed U.S. patents and U.S. patent application publications are not enclosed since it is no longer required according to the July 11, 2003 waiver of the requirement for copies of cited U.S. patents and U.S. patent application publications in national patent applications filed after June 30, 2003 and international applications entering the national stage under 35 U.S.C. § 371 after June 30, 2003.

The documents are being submitted within three (3) months of the filing or entry of the national stage of this application or before the first Office Action on the merits, whichever is later. Since the documents are being filed within the time period set forth in 37 C.F.R. § 1.97(b) no fee or statement is required.

To assist the Examiner, the documents are listed on the attached form PTO-1449. It is respectfully requested that an Examiner-initialed copy of this form be returned to the undersigned.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

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Substitute for forms 1449A/PTO & 1449B/PTO FIRST INFORMATION DISCLOSURE STATEMENT BY APPLICANT	ATTORNEY'S DKT NO. 005950-832	APPLICATION NO. 10/621,718
	APPLICANT Robert M. Carlson, et al.	
	FILING DATE July 16, 2003	GROUP 2811

JUL 15 2004
OFFICE

U.S. PATENT DOCUMENTS				
Examiner Initials	Document Number	Kind Code (if known)	Name of Patentee or Applicant of Cited Document	Issue/Publication Date (MM-DD-YYYY)
	5,347,063	A	Shen	09-13-1994
	2002/0193648	A1	Dahl, et al.	12-19-2002

FOREIGN PATENT DOCUMENTS					
Examiner Initials	Document Number	Kind Code (if known)	Country	Date of Publication (MM-DD-YYYY)	Translation Yes No
	WO 01/27028	A1	PCT	04-19-2001	X

NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Include name of author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
	International Search Report from PCT/US03/22628, issued April 5, 2004.
	Dagnani, R., "Building from the Bottom Up", <i>C&EN</i> , Washington, pp. 27-32, October 16, 2000.
	Dahl, J.E., et al., "Isolation and Structure of Higher Diamondoid, Nanometer-Sized Diamond Molecules", <i>Science</i> 299:96-99 (2003).
	Drexler, K.E., "Nanosystems - Molecular Machinery, Manufacturing, and Computation", <i>John Wiley & Sons</i> , pp. 238-248, 258-271, 293-319 and 320-341 (1992).
	Gudipati, M.S., et al., "Infrared Spectra of [n]Staffanes", <i>J. Phys. Chem.</i> 96:10165-10176 (1992).
	Gust, D., "Molecular Wires and Girders", <i>Nature</i> 372:133-134 (1994).
	Ikkala, O., et al., "Functional Materials Based on Self-Assembly of Polymeric Supramolecules", <i>Nature</i> 295:2407-2409 (2002).
	Kato, T., "Self-Assembly of Phase-Segregated Liquid Crystal Structures", <i>Science</i> 295:2414-2417 (2002).
	Lehn, J.M., "Toward Self-Organization and Complex Matter", <i>Science</i> 295:2400-2402 (2002).
	Merkle, R.C., "Molecular Building Blocks and Development Strategies for Molecular Nanotechnology", <i>Nanotechnology</i> 11:89-99 (2000).
	Moore, J.S. et al., "Crafting Molecular Based Solids", <i>Chemistry & Industry</i> , pp. 556-560, July 18, 1994.
	Reinhoudt, D.N., et al., "Synthesis Beyond the Molecule", <i>Science</i> 295:2403-2406 (2002).
	Rietman, E.A., "Molecular Engineering of Nanosystems", <i>Springer-Verlag</i> , New York, pp. 148-149 (2001).
	Rouhi, A.M., "Tinkertoy Dreams", <i>C&EN</i> 79(31): 46-49 (2001).
	Sauvage, J-P., "Molecular Machines and Motors", <i>Springer-Verlag</i> , New York, pp. 19-52 (2001).
	Schultz, W., "Crafting a National Nanotechnology Effort", <i>C&EN</i> pp. 39-42, October 16, 2000.
	Service, R.F. et al., "Strength in Numbers", <i>Science</i> 295:2395-2397 (2002).
	Srivastava, D., "A Phenomenological Model of the Rotation Dynamics of Carbon Nanotube Gears with Laser Electric Fields", <i>Nanotechnology</i> 8:186-192 (1997).
	Whitesides, G.M. et al., "Self-Assembly at All Scales", <i>Science</i> 295:2418-2421 (2002).

Examiner Signature	Date Considered
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with M.P.E.P. § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Substitute for forms 1449A/PTO & 1449B/PTO	ATTORNEY'S DKT NO.	APPLICATION NO.
	005950-832	10/621,718
	APPLICANT	
	Robert M. Carlson, et al.	
FIRST INFORMATION DISCLOSURE STATEMENT BY APPLICANT	FILING DATE	GROUP
	July 16, 2003	2811

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	WO 01/27028	A1	PCT	04-19-2001	X

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	International Search Report from PCT/US03/22628, issued April 5, 2004.
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